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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/815,933 | 04/02/2004 | Alexander Buhl | 41653-201032 | 9442 |

26694 7590 05/09/2005

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| EXAMINER |
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TAWFIK, SAMEH

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| ART UNIT | PAPER NUMBER |
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3721

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/815,933

Applicant(s)

BUHL ET AL.

Examiner

Sameh H. Tawfik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
4a) Of the above claim(s) 14-26 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-13 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Slayter et al. (3,050,427).

Slayter discloses a method for producing a non-woven fiber composite for the manufacture of filters in the tobacco industry (column 2, lines 50-54; via “and many other uses”) the method comprising feeding separated fiber materials (Fig. 1; via fiber separated fiber material 34) to a fluidized bed (Fig. 1; via suction box 31 and chain 29) transporting the separated filter material inside the fluidized bed to a rod-forming device essentially by a transport air flow flowing in the direction of the rod-forming device (Figs. 1 and 2; via air flow through the upper opening of 23 by hopper 24 and roller 21 toward the suction box 31, which make the air flow flowing in the direction of the rod forming device), and compiling the filter material on the rod-forming device (via by roll 32 and chain 41).

Regarding claim 2: wherein the filter material comprises fibers (via fibers 34).

Regarding claim 3: further comprising providing fibers of different compositions (Fig. 1; via by spraying bonds 39 would effect the fibers composition and by un-equally spraying the bond 39, that will make the fibers of different compositions).

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Regarding claim 4: wherein the fibers (34) in the fluidized bed (via 29 and 31) further comprises at least one additive (via binder 39).

Regarding claim 5: wherein the separated fibers (34) have a length from about 2 to about 100mm.

Regarding claim 6: wherein the average fiber diameter of the separated fibers (34) is in the range of from about 10 to about 40 μ m.

Regarding claim 7: wherein the average fiber diameter of the separated fibers (34) is in the range of from about 20 to about 38 μ m.

Regarding claim 11: successively feeding separated fiber materials (34) of differing composition (via by spraying bonds 39) to the fluidized bed (via 31 and 29).

Regarding claim 12: wherein the feeding step further comprises the separating of fibers (Fig. 1; via by drum 26).

Regarding claim 13: further comprises forming a continuous fiber filter rod (Fig. 1; via 16) from the compiled fibers (13) and dividing the continuous rod (16) into individual filter sections (34).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slayter et al. (3,050,427).

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Slayter does not disclose that the separated fibers are synthetic fibers. However, the examiner takes an official notices that using synthetic fibers is old, well known, and available in the art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Slayter's method for producing a non-woven fiber, by using a synthetic fibers, in order to easily shaping the filters to specific shape.

Regarding claim 9: Slayter discloses that the fiber (34) strength of the synthetic fibers is from about 1 to about 20 dtex.

Regarding claim 10: Slayter discloses that wherein the fiber strength of the synthetic fibers (34) is from about 2 to about 6 dtex.

Response to Arguments

Applicant's arguments filed 04/05/2005 have been fully considered but they are not persuasive.

Applicants argue in page 9 of the arguments that Slayter's reference does not disclose a fluidized bed as described in Hawley's Condensed Chemical Dictionary as "a technique in which a finely divided solid is caused to behave like a fluid by suspending it in a moving gas or liquid." That separated fibers are suspended in air as the fibers move along the fluidized bed, Slayter does not utilize a fluidized bed where the fibers are suspended in a moving gas. The examiner believes that Slayter disclosed a "fluidized bed" as described by the Hawaleley's dictionary as "a technique in which a finely divided solid (via 34) is caused to behave like a fluid (via by flowing downwardly) by suspending it in a moving gas or liquid (via by using the vacuum means to flow gas downwardly)". Note that using the vacuum means to suck the air downwardly with the

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divided solid 34 could be consider as via 34 behaving like a fluid by suspending it in a moving gas via sucking air.

Applicants further argue in page 9 and 10 of the arguments that in the applicants invention the fluidized bed occurs when transport air, running in a substantially horizontal direction , meets the falling fiber particles; as Slayter bears no mention of air flow and can not anticipate the present invention. The examiner believes that applicants arguing about something not disclosed on the claim language “running in a substantially horizontal direction” was not disclosed on the claim language.

Applicants argue in page 10 of the arguments that the present claims require transport “essentially by a transport air flowing in the direction of the rod forming device.” Transport, as it occurs in the claimed device is in a horizontal direction. The examiner believes that such transfer as claimed could be also consider transfer in vertical direction as disclosed on Slayter’s reference and not as argued by applicants in horizontal direction. Note that the sucked air by vacuum means in Slayter could be consider as transporting means while transporting 34 downwardly.

Applicants again argue in page 10 of the arguments that Slayter does not disclose air moving in a horizontal direction to transport air flow flowing in the direction of the rod forming device. The examiner believes that applicants argue for something not clearly disclosed on the claim language, which is the air moving in a horizontal direction.

Applicants argue in page 11 of the arguments that Slayter’s reference does not disclose method for producing a nonwoven fiber composite for the manufacture of filters in the tobacco

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industry. The examiner believes that such limitations not positively claimed on the body of the claim, it is only on the preamble of the claim, which is not given much weight.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

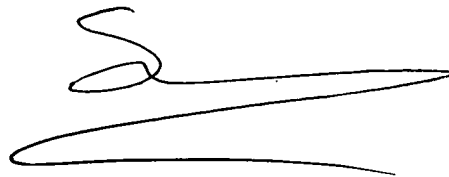
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sameh H. Tawfik whose telephone number is 571-272-4470. The examiner can normally be reached on Tuesday - Friday from 8:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sameh H. Tawfik
Patent Examiner
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A handwritten signature in black ink, consisting of a stylized 'S' followed by a horizontal line that curves upwards at the end.

ST.